

**CLAIMS:**

1 1. A device for visually inspecting optical component comprising:  
2       a borescope, said borescope having a borescope insertion tube and an optical lens  
3 for viewing a target; and  
4       borescope insertion tube adapter for adapting the borescope insertion tube to an  
5 optical component to be inspected.

1 2. The device recited in claim 1 above, wherein the borescope insertion tube adapter  
2 further comprises:  
3       an adapter body, said adapter body being compatible for mating with the optical  
4 component to be inspected.

1 3. The device recited in claim 2 above, wherein the borescope insertion tube adapter  
2 secures the borescope insertion tube at a predetermined position within the adapter body.

1 4. The device recited in claim 2 above, wherein the predetermined position within  
2 the adapter body is within an effective focal distance for the borescope.

1 5. The device recited in claim 2 above, wherein the borescope insertion tube adapter  
2 further comprises:  
3       a protective sleeve disposed between said borescope insertion tube and said  
4 adapter body.

1 6. The device recited in claim 5 above, wherein the protective sleeve further  
2 comprises:  
3       a lock of securing the protective sleeve to the borescope insertion tube.

1    7.    The device recited in claim 2 above, wherein the adapter body is one of an SC,  
2    ST, FC, E2000, LC, LX, MU, MT components type.

1    8.    The device recited in claim 2 above, wherein the adapter body cooperates with a  
2    shutter on the optical component to be inspected.

1    9.    The device recited in claim 2 above, wherein the adapter body cooperates  
2    automatically actuating a shutter on the optical component to be inspected simultaneously  
3    during insertion to said optical component to be inspected.

1    10.   The device recited in claim 2 above, wherein the borescope further comprises:  
2        a video camera for capturing images of a target on the optical component to be  
3    inspected.

1    11.   The device recited in claim 6 above, wherein the borescope further comprises:  
2        a video camera for capturing images of a target on the optical component to be  
3    inspected.

1    12.   The device recited in claim 2 above, wherein the borescope further comprises:  
2        a light emitter for illuminating a target on the optical component to be inspected.

1    13.   The device recited in claim 11 above, wherein the borescope further comprises:  
2        a monitor for displaying images of the target on the optical component to be  
3    inspected.

1    14.   The device recited in claim 2 above, wherein the adapter body is configured such  
2    that said borescope insertion tube adapter is maneuverable while mated with the optical  
3    component to be inspected, whereby the position of the optical lens is adjustable.

1 15. The device recited in claim 2 above, wherein the optical component to be  
2 inspected is one of a MU, MT, LC and LX type configured on a high density optical port.

1 16. A method for implementing a borescope for visually inspecting optical  
2 component, said borescope having a borescope insertion tube coupled to an adapter body  
3 and an optical lens received therein, said optical lens for viewing a target portion on an  
4 optical component comprising:

5 engaging the adapter body to the optical component with the target portion to be  
6 inspected; and

7 visualizing the target portion of said optical component through said borescope.

1 17. The method recited in claim 16 above, wherein engaging the borescope insertion  
2 tube adapter to the optical component further comprises coupling the borescope insertion  
3 tube adapter to the optical component.

1 18. The method recited in claim 17 above, wherein prior to inserting the borescope  
2 insertion tube adapter into the optical component the method further comprises:

3 securing the adapter body to the borescope insertion tube at a predetermined  
4 position within the adapter body, and

5 securing the borescope insertion tube at a predetermined position within the  
6 adapter body.

1 19. The method recited in claim 17 above, wherein the predetermined position within  
2 the adapter body is within an effective focal distance for the borescope.

1 20. The method recited in claim 17 above further comprises:

2 disposing a protective sleeve between said borescope insertion tube and said adapter  
3 body.

1 21. The method recited in claim 20 above further comprises:  
2 locking the protective sleeve to the borescope insertion tube.

1 22. The method recited in claim 17 above, wherein the adapter body is one of an SC,  
2 ST, FC, E2000, LC, LX, MU, MT components type.

1 23. The method recited in claim 17 above, wherein coupling the borescope insertion  
2 tube adapter to the optical component further comprises:  
3 operating a shutter on the optical component to be inspected.

1 24. The method recited in claim 23 above, wherein operating a shutter on the optical  
2 component to be inspected further comprises:  
3 actuating a shutter on the optical component to be inspected simultaneously  
4 during insertion to said optical component to be inspected.

1 25. The method recited in claim 17 above further comprises:  
2 capturing images the target portion of said optical component to be inspected.

1 26. The method recited in claim 21 above, wherein the borescope further comprises:  
2 a video camera for capturing images of a target on the optical component to be  
3 inspected.

1 27. The device recited in claim 17 above further comprises:  
2 illuminating the target portion of said optical component to be inspected.

1 28. The method recited in claim 26 above further comprises:  
2 viewing an image images of the target portion of the optical component to be  
3 inspected.

1 29. The method recited in claim 17 further comprises:  
2 maneuvering the adapter body while engaged with the optical component to be  
3 inspected.

1 30. The method recited in claim 17 above, wherein the optical component to be  
2 inspected is one of a MU, MT, LC and LX type configured on a high density optical port.